

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 1 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

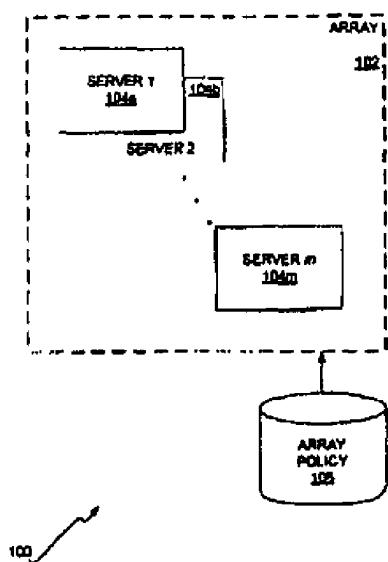
Delete the title page and substitute therefore the attached title page.

On the face page, in field (56), under "Other Publications", in column 2, line 11, after "CA" insert --, --.

On Sheet 1 of 12, please replace Fig. 1(a) with the following figure:

ARRAY ONLY

FIG 1(a)



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

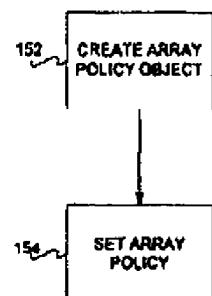
Page 2 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 2 of 12, please replace FIG 1(b) with the following figure:

ARRAY ONLY

FIG 1(b)



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

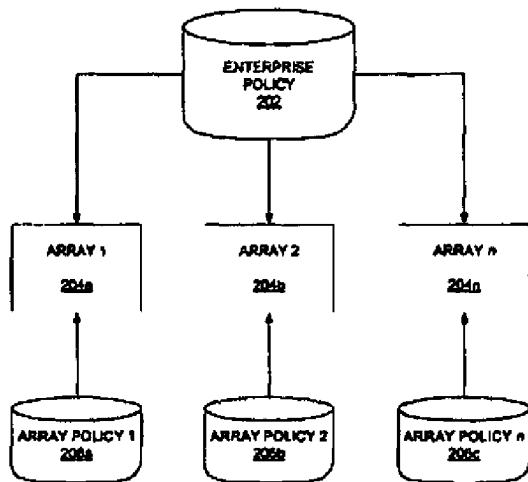
PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 3 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 3 of 12, please replace FIG 2(a) with the following figure:

FIG 2(a)



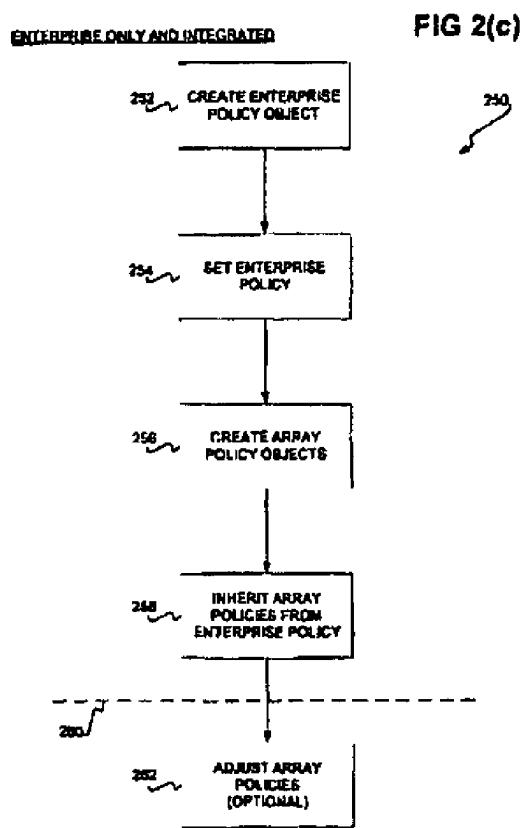
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 4 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 5 of 12, please replace FIG 2(c) with the following figure:



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

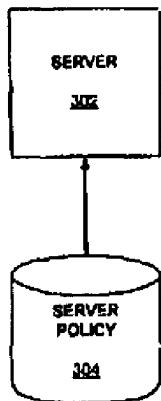
Page 5 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 6 of 12, please replace FIG 3(a) with the following figure:

SERVER ONLY

FIG 3(a)



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

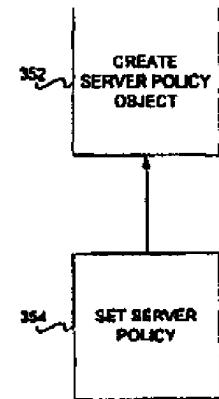
Page 6 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 7 of 12, please replace FIG 3(b) with the following figure:

SERVER ONLY

FIG 3(b)



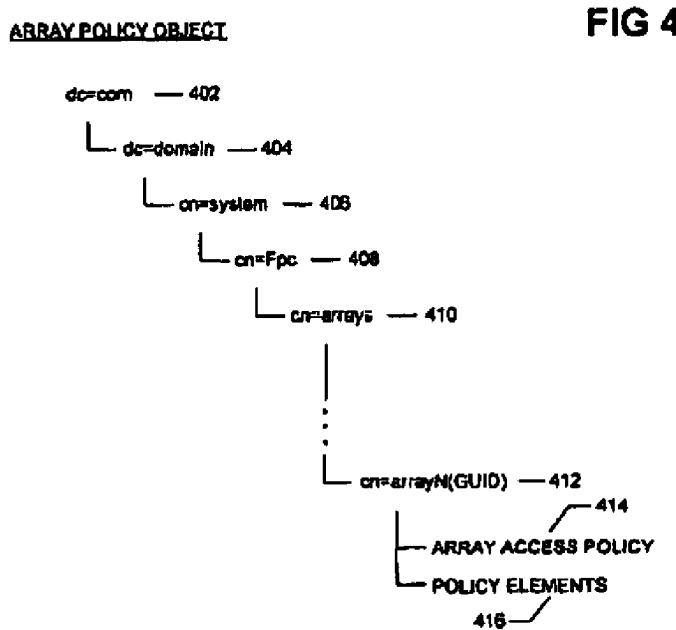
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 7 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 8 of 12, please replace FIG 4 with the following figure:



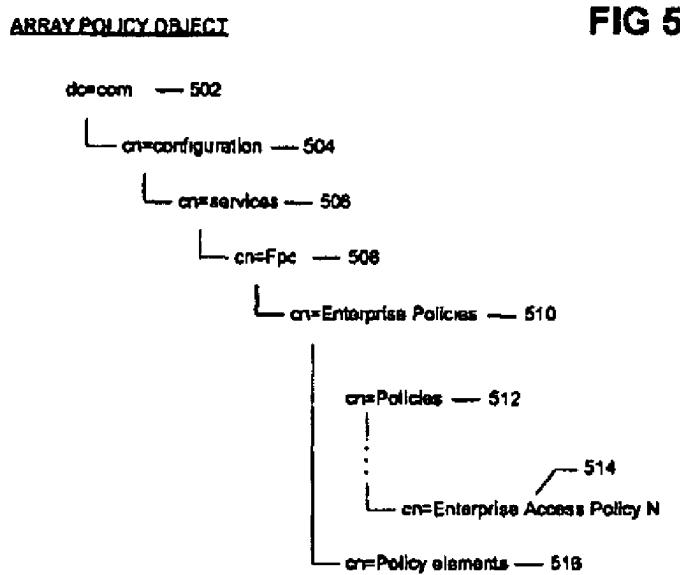
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 8 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 9 of 12, please replace FIG 5 with the following figure:



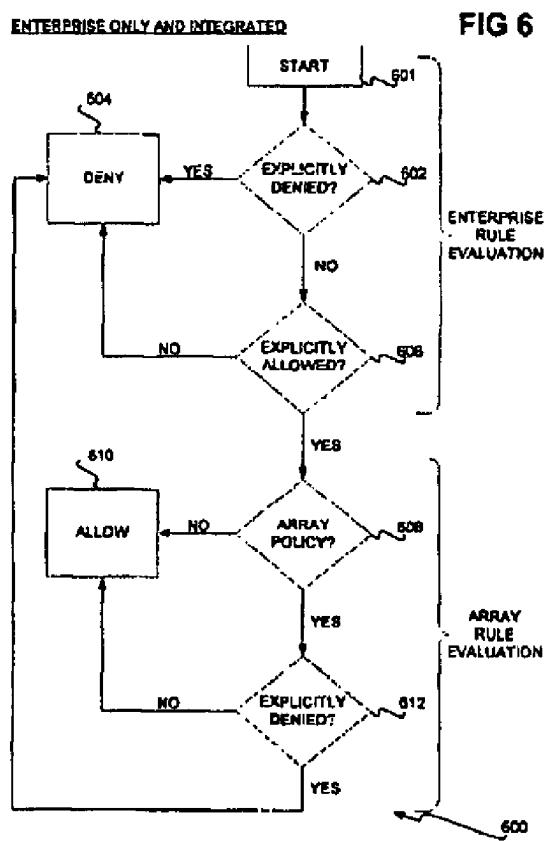
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 9 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 10 of 12, please replace FIG 6 with the following figure:



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

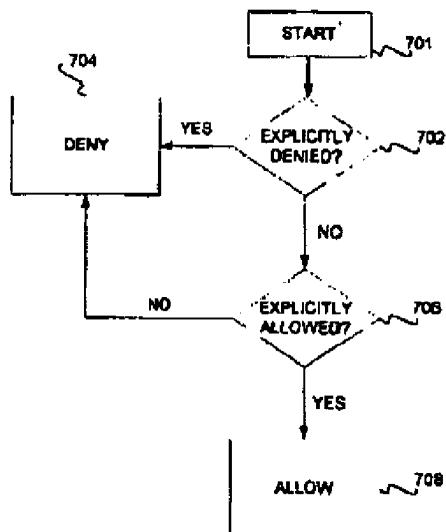
PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 10 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Sheet 11 of 12, please replace FIG 7 with the following figure:

ARRAY ONLY AND SERVER ONLY **FIG 7**



700

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,013,332 B2
APPLICATION NO. : 09/681106
DATED : March 14, 2006
INVENTOR(S) : Guy Friedel et al.

Page 11 of 12

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 12, line 18, in Claim 1, after "each of one" delete "of" and insert -- or --, therefor.

In column 13, line 61, in Claim 13, delete "governing" and insert -- governing --, therefor.

In column 13, line 65, in Claim 13, delete "time" and insert -- type --, therefor.

In column 14, line 18, in Claim 15, delete "byte" and insert -- by the --, therefor.

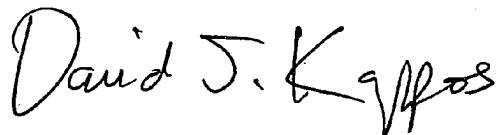
In column 14, line 59, in Claim 17, after "the" insert -- at --.

In column 15, line 12, in Claim 19, delete "may" and insert -- array --, therefor.

This certificate supersedes the Certificate of Correction issued September 29, 2009.

Signed and Sealed this

Third Day of November, 2009



David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Friedel et al.(10) Patent No.: **US 7,013,332 B2**
(45) Date of Patent: **Mar. 14, 2006**(54) **DISTRIBUTED POLICY MODEL FOR
ACCESS CONTROL**(75) Inventors: **Guy Friedel**, Bellevue, WA (US); **Ariel Katz**, Redmond, WA (US); **Yaron Shamir**, Zichron Yaakov (IL); **Abraham Nathan**, Haifa (IL)(73) Assignee: **Microsoft Corporation**, Redmond, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 739 days.

(21) Appl. No.: **09/681,106**(22) Filed: **Jan. 9, 2001**(65) **Prior Publication Data**

US 2002/0138631 A1 Sep. 26, 2002

(51) **Int. Cl.**
G06F 15/173 (2006.01)(52) **U.S. Cl.** **709/223; 709/224; 709/225;**
713/201; 707/10(58) **Field of Classification Search** **709/223-225;**
709/229; 713/201; 707/3, 10, 200
See application file for complete search history.(56) **References Cited**

U.S. PATENT DOCUMENTS

5,787,427 A * 7/1998 Benantar et al. 707/9
 5,911,143 A * 6/1999 Deinbalt et al. 707/103 R
 5,991,877 A * 11/1999 Luckenbaugh 713/200
 6,466,932 B1 * 10/2002 Dennis et al. 707/3
 6,647,388 B1 * 11/2003 Numao et al. 707/9
 6,708,276 B1 * 3/2004 Yarsa et al. 713/201
 6,718,380 B1 * 4/2004 Mohabab et al. 709/223
 2002/0002684 A1 * 1/2002 Fox et al. 713/200
 2003/0023587 A1 * 1/2003 Dennis et al. 707/3

OTHER PUBLICATIONS

T.C. Ting, S.A. Demurjian and M.Y. Hu, Requirements, Capabilities and Functionalities of User-Role Based security for an Object-Oriented Design Model, Jun. 25, 1997, pp. 275-296.*

Dirk Jonscher, Extending access control with duties—realized by active mechanisms, Jun. 25, 1997, pp. 91-111.*

Greenwald, A new security policy for distributed resource management and access control, Proceedings of the UCI, A conference on New security paradigms workshops Sep. 17-20, 1996, Lake Arrowhead, CA USA.

Nexex Policy Suite, Technical Brief, <http://www.nexex.com/Technical%20Brief.html>, date unknown.

* cited by examiner

Primary Examiner—Ario Etienne

Assistant Examiner—LaShonda Jacobs

(74) Attorney, Agent, or Firm—Lee & Hayes, PLLC

(57) **ABSTRACT**

A distributed policy model for access control is disclosed. In an enterprise-only mode, each node within a networking environment has its resource access governed by the same enterprise-wide policy. The enterprise-wide policy is set through creation of one or more enterprise policy objects. In an integrated mode, nodes are organized in a number of arrays. Each array has an array-wide policy set through creation of an array policy object. Each array-wide policy initially inherits the enterprise-wide policy. Additional resource access and protocol use restrictions can be added to the individual array-wide policies. In an array-only mode, each array has an array-wide policy also set through creation of an array policy object, but the policy does not necessarily initially inherit an enterprise-wide policy. In a stand-alone mode, a single server has its own policy.

21 Claims, 12 Drawing Sheets